CLAIMS

1. A method of creating a file describing a digital image,
comprising the steps of:
- defining at least one zoomable area in the image, a zoomable area being defined by characteristics of location of said area in the image and for which additional data are available,
- writing said characteristics of said at least one zoomable area in a first file,
- writing in the first file at least one management function for navigation in the image.

2. The method according to claim 1, wherein said at least one management function relates to at least one area of the image which is not a zoomable area.

3. The method according to claim 2, wherein said at least one management function comprises a step of displaying a message.

4. The method according to claim 2, wherein said at least one management function comprises a step of zooming said at least one area by interpolation.

5. The method according to Claim 1, wherein the first file is a file of the SWF type.

6. The method according to Claim 1, wherein the writing of the characteristics (E3) is performed by object instancing.

7. The method according to Claim 1, also including the steps of compression of the image and storage of the compression data in a second file,

the compression data making it possible to reconstruct the image and further containing said additional data.

8. The method according to Claim 7, wherein the compression is of the JPEG2000 type.

9. The method according to Claim 1, wherein the image has a given resolution and wherein said additional data define at least one additional resolution for the zoomable area.

10. The method according to Claim 1, wherein the image has a given quality and wherein said additional data define at least one additional quality for the zoomable area.

11. A method of reading a file describing a digital image comprising the steps of:

- reading characteristics of at least one zoomable area in a first file, a zoomable area being defined by characteristics of location of said area in the image and for which additional data are available,
- receiving a navigation instruction,
- reading at least one management function for navigation in the image, in the first file, and
- executing said at least one function.

12. The method of claim 11, comprising the step of testing compatibility between the navigation instruction and the characteristics of said at least one zoomable area,

wherein the step of executing said at least one function occurs only if the result of the previous test is incompatibility.

13. The method according to Claim 11, wherein the navigation instruction comprises an instruction included in the list consisting of an instruction to move in the image and a zoom instruction.

14. The method according to Claim 11, wherein the execution of said at least one navigation function comprises the display of a message.

15. The method according to Claim 11, wherein the execution of said at least one navigation function comprises a zoom by interpolation in the decoded image.

16. The method according to Claim 12, comprising the step of decompressing (E17) said additional data, if the result of the compatibility test is positive.

17. A device for creating a file describing a digital image,
comprising:
- means for defining at least one zoomable area in the image, a zoomable area being defined by characteristics of location of said area in the image and for which additional data are available,
- means for writing said characteristics of said at least one zoomable area in a first file,
- means for writing in the first file at least one management function for navigation in the image.

18. The device according to claim 17, wherein said at least one management function relates to at least one area of the image which is not a zoomable area.

19. The device according to claim 18, wherein said at least one management function comprises the display of a message.

20. The device according to claim 18, wherein said at least one management function comprises a zoom in said zone by interpolation.

21. The device according to Claim 17, wherein the first file is a file of the SWF type.

22. The device according to Claim 17, wherein the means for writing the characteristics includes means for object instancing.

23. The device according to Claim 17, comprising means for compression of the image and means for storage of the compression data in a second file, the compression data making it possible to reconstruct the image and further containing said additional data.

24. The device according to Claim 23, wherein the compression is of the JPEG2000 type.

25. The device according to Claim 17, wherein the image has a given resolution and wherein said additional data define at least one additional resolution for the zoomable area.

26. The device according to Claim 17, wherein the image has a given quality and wherein said additional data define at least one additional quality for the zoomable area.

27. A device for reading a file describing a digital image comprising:

- means for reading characteristics of at least one zoomable area in a first file, a zoomable area being defined by characteristics of location of said area in the image and for which additional data are available,
- means for receiving a navigation instruction,
- means for reading at least one management functions for navigation in the image, in the first file, and

- means for executing said at least one function.

28. The device of claim 27, comprising:

- means for testing compatibility between the navigation instruction and the characteristics of said at least one zoomable area,

wherein execution of said at least one function occurs only if the result from the testing means is incompatibility.

29. The device according to Claim 27, wherein the navigation instruction comprises an instruction included in the list consisting of an instruction to move in the image and a zoom instruction.

30. The device according to Claim 27, wherein the execution of said at least one navigation function comprises the display of a message.

31. The device according to Claim 27, wherein the execution of said at least one navigation function comprises a zoom by interpolation in the decoded image.

32. The device according to Claim 28, comprising the step of decompressing said additional data, if the result from the testing means is positive.

33. The device according to Claim 17, wherein the definition and writing means are incorporated in:

- a microprocessor (100),

- a read only memory (102) containing a program for processing the data, and

- a random access memory (103) containing registers adapted to record the variables modified during the execution of said program.

34. The device according to Claim 27, wherein the reading, reception, test and execution means are incorporated in:

- a microprocessor,

- a read only memory containing a program for processing the data, and

- a random access memory containing registers adapted to record the variables modified during the execution of said program.

35. A digital image processing apparatus, characterized in that it comprises means adapted to implement the method according to Claim 1 or 11.

36. A digital image processing apparatus, characterized in that it comprises the device according to Claim 17 for 27.

37. An information storage means, characterized in that it can be read by a computer or by a microprocessor, integrated or not into the device, possibly removable, and in that it stores a program implementing the method according to Claim 1 or 11.

38. A computer program, characterized in that it can be read by a microprocessor and in that it comprises one or more sequences of instructions able to implement the method according to Claim 1 or 11.